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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/698,646

10/31/2003

Raymond L. Watrous

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EXAMINER

PATTON, AMANDA K

ART UNIT

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3762

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/698,646	<b>Applicant(s)</b> WATROUS, RAYMOND L.	
	<b>Examiner</b> Amanda Patton	<b>Art Unit</b> 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 and 21-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-20 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's amendment dated March 10, 2008 is acknowledged. In response to the newly filed formal drawings, the objection to the drawings has been withdrawn. In response to the amendment to claim 18, the objection to claim 18 has been withdrawn. As indicated by Applicant, claims 1-30 are pending in this application, with claims 1-11 and 21-29 withdrawn from consideration.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claim 30** is rejected under 35 U.S.C. 102(e) as being anticipated by Murphy (USPN 6,139,505).

Murphy discloses an auscultatory diagnostic decision support system comprising: an acoustic sensor configured to produce a bodily sound signal (e.g. analog microphones 102); a bodily sound analysis system adapted to receive and analyze the bodily sound signal (e.g. computer station 110 and circuitry therein); and a display device including a graphical user interface to guide a user through a predetermined protocol for multiple recording locations to obtain a response sequence of bodily sound signals for use by the bodily sound analysis device (e.g. graphical user interface 126); wherein the GUI displaces multiple waveforms corresponding to

the respective sequence of bodily sound signals in a manner such that the multiple waveforms can be visually correlated (e.g. Figures 5A and 5B).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breseden et al. (US Pat. 5,213,108, as cited by Applicant) in view of Murphy.

Regarding **claim 12**, Breseden teaches system comprising (Figure 1; Col. 4, line 40 - Col. 3, line 40): a cardiac acoustic sensor (e.g. transducer 124) for capturing a waveform of a heart sound signal; a heart sound analysis device (e.g. display module 130) for receiving and analyzing the heart sound signals; and a display device (e.g. LCD graphic display 138) including a GUI to guide a user through a predetermined protocol (e.g. Col. 12, lines 50-60). Breseden does not teach a GUI wherein the GUI displays multiple waveforms corresponding to the respective sequence of bodily sound signals in a manner such that the multiple waveforms can be visually correlated. Murphy discloses an auscultatory diagnostic decision support system wherein the GUI displays multiple waveforms corresponding to the respective sequence of bodily sound signals in a manner such that the multiple waveforms can be visually correlated (e.g. Figures 5A and 5B). It would have been obvious to use the GUI displaying multiple waveforms as taught by Murphy in the device of Breseden, as both devices are auscultatory diagnostic decision support

systems and since such a modification would provide the system of Bredesen with the ability to visually correlate the recorded sound signals for providing the predictable results of easier diagnosis of heart conditions.

Regarding **claim 13**, Bredesen additionally teaches a wire (e.g. electrically conductive cord 128) for transmitting heart sound signals from the cardiac acoustic sensor (e.g. transducer 124) to the heart sound analysis device (e.g. display module 130).

Regarding **claim 14**, Bredesen discloses the claimed invention including a GUI including a menu having a plurality of operating languages for selecting an operating language of the auscultatory diagnostic decision support system (Col. 15, lines 40-45) except the express mention of a pull-down menu. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system as taught by Bredesen with a pull-down menu since it was well known in the art that pull-down menus are used to provide the predictable results of easy organization of menu items.

Regarding **claim 15**, Bredesen additionally teaches an earpiece (e.g. as shown in Figure 1) and a device in which the GUI includes a re-record option to allow a user to record a substitute waveform (e.g. Col. 12, line 50 - Col. 13, line 2).

Regarding **claim 16**, Bredesen additionally teaches a heart sound analysis device (e.g. display module 130) including special purpose circuitry (e.g. as shown in Figures 3a-3i).

Regarding **claim 17**, Bredesen additionally teaches a GUI that includes a visual representation of the anterior thorax (e.g. sternum diagram 132) and a plurality of positional markers to pinpoint desired placements of the cardiac acoustic sensor.

Regarding **claim 19**, Bredesen additionally teaches a cardiac acoustic sensor that is an electronic stethoscope.

**Claims 18 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bredesen and Murphy as applied to claims 12 and 19 above, and further in view of Nova et al. (US Pat. 6,334,070, as previously cited). Bredesen discloses the claimed invention except at a pre-recorded voice track wherein the voice track is transmitted to a speaker or an earpiece as a series of audio prompts to guide the user through a predetermined protocol. Nova teaches that it is known in the art to use a series of aural instructions to guide a user through a predetermined protocol in an external medical device (e.g. Abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Bredesen with the pre-recorded audio protocol of Nova, since such a modification would provide audio signals for guiding a user through a predetermined protocol for providing the predictable results of an auscultatory protocol that did not require the user to look at the display of the device.

### ***Response to Arguments***

Applicant's arguments with respect to claims 12-20 and 30 have been considered but are moot in view of the new ground(s) of rejection necessitated by Applicant's amendment.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda Patton whose telephone number is (571) 270-1912. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3762

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AKP/  
Examiner, Art Unit 3762

/George R Evanisko/  
Primary Examiner, Art Unit 3762